

We Claim:

1. A blood processing system comprising
a blood processing set including a source of
blood cells, and a blood component collection flow
5 channel coupled to the source of blood cells including a
blood cell storage container and an in-line filter to
remove leukocytes from the blood cells before entering
the blood cell storage container, the in-line filter
including a fibrous filter medium, first and second
10 flexible housings, a unitary, continuous peripheral seal
formed by application of pressure and radio-frequency
heating in a single process to join the first and second
flexible housings to each other, as well as join the
fibrous filtration medium to the first and second
15 flexible housings, and
a pump station adapted to be placed into
communication with the blood component collection flow
channel to pump blood into the blood cell storage
container through the in-line filter.
- 20 2. A blood processing system according to
claim 1
further including a fixture to restrain
expansion of the first and second filter housings as a
result of pressure applied during operation of the pump
25 station.
3. A blood processing system according to
claim 2
wherein the source of blood cells includes a
donor flow channel including a blood separation device to
30 separate blood cells from donor whole blood.
4. A blood processing system according to
claim 1
wherein the source of blood cells includes a
donor flow channel including a blood separation device to
35 separate blood cells from donor whole blood.

5. A system according to claim 1 or 2 or 3
or 4

5 wherein the controller includes a function to
derive a value reflecting volume of blood cells present
in the blood cell storage container after passage through
the filter as a percentage of volume of blood cells
conveyed to the filter.

6. A system according to claim 1 or 2 or 3
or 4

10 wherein the pump station includes a fluid
pressure actuated pump and an actuator to apply fluid
pressure to the pump.

7. A system according to claim 1 or 2 or 3
or 4

15 wherein the blood cells comprise red blood
cells.

8. A method of processing blood comprising
using the blood processing system as defined in claim 1
or 2 or 3 or 4.